



| Address  | Lock bit |     | High byte                        | Low byte                          |
|----------|----------|-----|----------------------------------|-----------------------------------|
| QID      | 0        | RmW | Blocks to remove                 | Lock control                      |
| QID + 2  |          |     | ---                              | Block size (12-bits)              |
| QID + 4  |          | -   | Tail of blocks                   |                                   |
| QID + 6  |          | RmW | Used blocks                      | Empty blocks<br>(/Used Threshold) |
| QID + 8  |          | 1   | Type (Single = -1/Element = RID) |                                   |
| QID + 10 |          | 1   | Committed Tail Block             |                                   |
| QID + 12 |          | 1   | ---                              | Committed Tail Offset(12-bits)    |
| QID + 14 |          | 2   | Latest Read Pointer              |                                   |
| QID + 16 |          | 2   | ---                              | Current Head Offset(12-bits)      |
| QID + 18 |          | 2   | Committed Read Pointer           |                                   |
| QID + 20 |          | 2   | ---                              | Committed Head Offset(12-bits)    |
| QID + 22 |          | 2   | ---                              | Blocks to release                 |

Figure 2